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REMARKS

Status of the Claims

Claims 32-62 are pending in the present application. Claims 32-49 are rejected under 35 U.S.C. §112, first paragraph, for allegedly containing new matter.

Notation under 37 CFR §1.121(c)

The Examiner has noted that claim 34 does not comply with 37 CFR §1.121(c) because it contains amendments that were not appropriately indicated by bracketing or underlining.

Applicant agrees and thanks the Examiner for pointing out the typographical error in claim 34. Applicant has corrected the error by restoring the language originally presented in the paper filed 10-09-2001. Thus, claim 34 now recites "wherein said molecular energy acceptor is a fluorescence quencher" rather than "wherein Q is a fluorescence quencher."

Rejection under 35 U.S.C. §112, First Paragraph (New Matter)

The Examiner has rejected claims 32-49 for allegedly containing new matter. The Examiner asserts that there is no support in the specification for the compound of claim 32 having the formula

in which X and Y are stabilizing moieties, even though claim 50 recites a compound having the formula

$$D-R^{1}-Nu^{1}-R^{2}-O-P-O-NA-O-P-O-R^{3}-Nu^{2}-R^{4}-Q$$

$$CHOL$$
CHOL
CHOL
CHOL

in which CHOL is cholesterol. In an interview with Applicant's representative Dr. Jeffry S. Mann, the Examiner agreed that cholesterol is a sub-species of the X and Y stabilizing moieties. Applicant respectfully traverses the rejection.

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The description requirement is a simple statutory requirement that the patent disclosure contain sufficient detail to assure the public that the inventor "had possession, as of the filing date of the application relied on, of the specific subject matter later claimed by him. It is *not necessary* that the application describe the claim limitations *exactly*, but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations" (emphasis added). See *In re Wertheim*, 191 USPQ 90, 96 (CCPA 1976); *Ralston Purina Co. v. FarMar-Co., Inc.*, 227 USPQ 177, 179 (Fed. Cir. 1985)[stating that the test for support of the subject matter of a claim is whether the disclosure of an application "reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter." See *Ralston Purina Co. v. FarMar-Co., Inc.*, 227 USPQ 177, 179 (Fed. Cir. 1985)(quoting *In re Kaslow*, 217 USPQ 1089, 1096 (Fed. Cir. 1983)]. In addition, the MPEP explicitly recognizes the principle that the "subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement." *See* MPEP §2163.02.

Applicant respectfully submits that the Examiner has improperly applied a mechanical test of *in haec verba* (in the same words) to reject claims 32-49 under 35 U.S.C. §112, first paragraph. The Examiner states that "[t]he only structures that branch off from the base structure recited in claim 50 are CHOL groups, and it is clear that the X and Y moieties recited in claim 32 are not limited to CHOL groups." The Examiner apparently asserts that Applicant is prohibited from claiming a compound having a formula of intermediate scope unless that *exact* formula appears in the specification. However, the law does not require that the specification set forth the *exact* formula that appears in a claim. Rather, the law merely requires that the specification *describe the subject matter of the formula* in terms sufficiently clear that persons of ordinary skill in the art can reasonably recognize that Appellant was in possession of compounds having the claimed formula. See *In re Wertheim*, 191 USPQ at 96. Applicant respectfully submits that the specification clearly describes the subject matter of the formula recited in claim 32.

The specification sets forth a compound of the formula:

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$$D-R^{1}-Nu^{1}-R^{2}-O-P-O-NA-O-P-O-R^{3}-Nu^{2}-R^{4}-Q$$

$$CHOL$$

$$CHOL$$

$$CHOL$$

$$CHOL$$

in which CHOL is a cholesterol derivative. *See* page 12, line 27. The specification specifically recites that cholesterol is a preferred stabilizing moiety:

In a preferred embodiment, at least one of the stabilizing moieties is a cholesteryl residue. In this embodiment, the cholesteryl residue is preferably introduced using a commercially available cholesteryl amidite (Glen Research) (emphasis added).

See page 16, lines 21-23. The specification further identifies cholesterol as a stabilizing group on page 54, lines 8-10:

Example 1 details the synthesis of an exemplary CAP molecule. This CAP uses two *cholesterol* stabilizing groups, a fluorescein donor and a rhodamine acceptor (emphasis added).

Applicant respectfully asserts that after reviewing these passages, one skilled in the art would immediately realize that cholesterol is a stabilizing moiety. Therefore, the specification reasonably conveys to the artisan that the inventor was in possession of a compound having the formula:

in which CHOL is a stabilizing moiety. Because the specification clearly describes a compound in which a stabilizing moiety may be attached to R² and R³, it cannot be fairly asserted that replacing the substituent "CHOL" with the stabilizing moiety symbols "X" and "Y" is new matter. Replacement of the "CHOL" group with the stabilizing moiety symbols "X" and "Y" gives the formula of claim 32:

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Thus, the specification describes the subject matter of the formula of claim 32 in terms sufficiently clear that persons of ordinary skill in the art can recognize that Appellant was in possession of the compound of claim 32. See *In re Wertheim*, 191 USPQ at 96.

Because the subject matter of the formula recited in claim 32 is clearly described in the specification, Applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,

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Attachments KEJ:kej 60129221 v1